

CDF DB: Present and Future

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What's new since last Taking Stock (6 months ago)

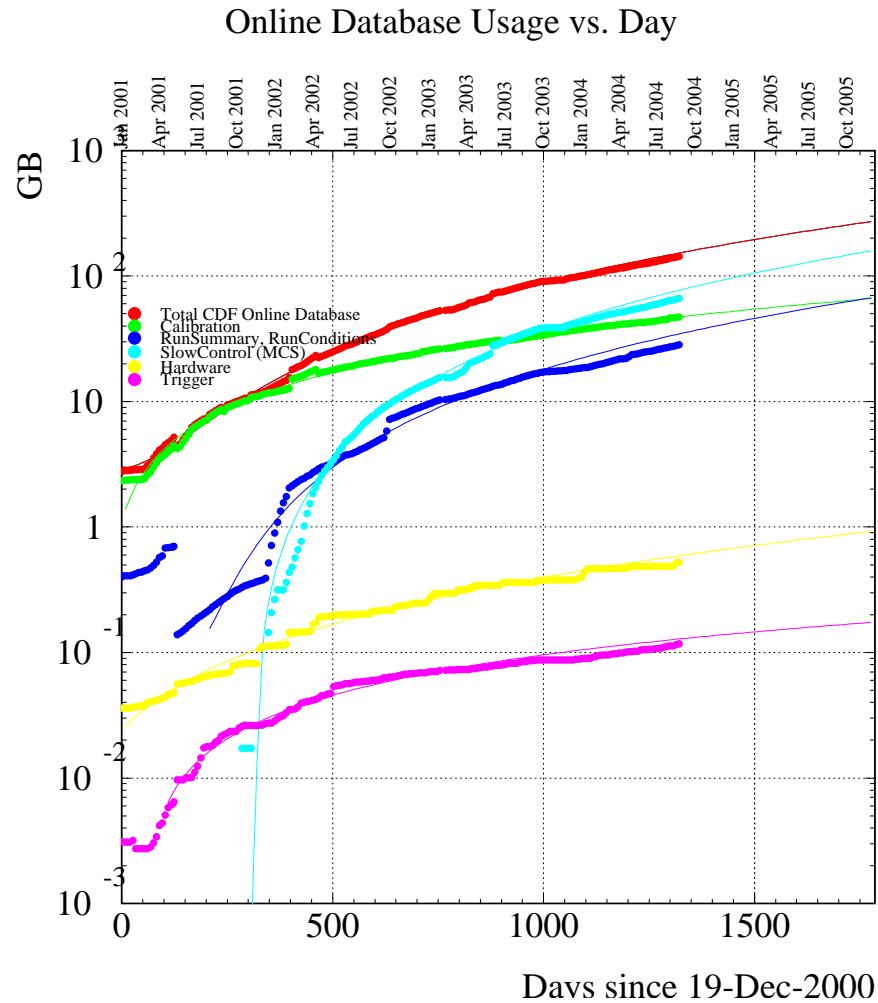
- replaced online production machine (b0dau35 → bzora1)
- replaced offline replica (fcdflnx1 → fcdfora6)
- global deployment of streams replication
- new DB instances everywhere
- deployment of Frontier in MC production

⇒ **should suffice until the end of CDF.**

Continuing needs for DBA services

- provided by Nelly, Anil, Richard and Julie – **essential!**
- 24x7 support of the main production machines
- replication (basic and streams)
- table analysis
- troubleshooting schema

Size needs



- ▶ Move the slow controls onto a separate (new) machine
- ▶ CDF online will pay for it – once we decide what we want

Frontier overview

(see Sergey's talk)

A multi-tiered DB architecture

- ▶ reduces latency at remote sites**
- ▶ reduces load on offline servers**
- ▶ decouples analysis jobs from schema changes**
- ▶ scalable distributed solution w/o Oracle licensing complications**

Changes the whole outlook!

- less dependent on Oracle**
- easy to beef-up: just add Squids**
- once in widespread use, an (almost) magical cure for most performance issues**

Frontier status

- ▶ A fully 'Frontierized' jobs in development since January
- ▶ Largely validated – two small wrinkles to work out
- ▶ Validation slowed down by lack of expert manpower on the CDF side

CDF API layer

- Largely under control
- Still missing ODBC – would like it to replace OTL (Dennis)
- Need occasional help from Dennis
- Work needed in Trigger DB, general clean-up (by CDF)

Manpower shortage on CDF end

Big issue: CDF side **seriously understaffed!**

- ▶ no tactical depth
- ▶ little committed expertise among physicists

⇒ **need to recruit more people/groups!**

Conclusions

- New hardware installed – good for a while
- ... especially once Frontier is widely used
- API in good shape, still need user support
- Heavily relying on support from DSG, DBS
- **Need more manpower from CDF**